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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,149	02/27/2002	Joseph Winkles	95-520	6606

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2000 M STREET NW SUITE 700  
WASHINGTON, DC 20036-3307

EXAMINER
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WONG, WARNER

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/083,149	<b>Applicant(s)</b> WINKLES ET AL.	
	<b>Examiner</b> Warner Wong	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Parthasarathy (US 6,831,916).

**Regarding claims 1 and 6**, Parthasarathy describes a method/channel adapter (fig. 2, Infiniband network with channel adapters matching applicant's fig. 1), the method comprising:

receiving a link management packet from a link partner and in response selecting, according to InfiniBand protocol, a selected active link width [and memory for storing port configuration settings] (col. 10, lines 16-64, using unique Management Datagram (MAD) along with Subnet Management Packets (SMP) to select and set port configuration to memory such as the Active Link Width);

[link layer module with bus controller for] setting a multiplexer circuit, configured for selectively switching frame data of a prescribed maximum link width to a selected one of a plurality of available link widths, to the selected active link width (fig. 5-6 & col. 10, lines 16-64, selecting port's Active Link Width to either 1x, 4x or 12x, where the end

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node's port performs multiplexing means for combining packets of VL 0-15 as shown in fig. 6);

receiving the frame data from an output buffer according to the prescribed maximum link width (fig. 6 & col. 9, line 56 to col. 10, line 5, receiving data packets 310 (frame data) from receive VL's FIFO (output) buffers according to the set (maximum) Active Link Width);

outputting the frame data from the multiplexer circuit to a transmit bus according to the selected active link width (col. 9, line 56-62, transmitting data packets 310 from the multiplexing means of fig. 6 according to the set Active Link Width);

**Regarding claims 2 and 7**, Parthasarthy describes that the multiplexer circuit includes a first multiplexer for outputting the frame data onto a first output according to a first of the available link widths, and a second multiplexer circuit configured for switching the frame data onto a second output according to a second of the available link widths, the setting step including selecting one of the output buffer, the first output, and the second output for transfer of the frame data according to the selected active link Width (fig. 6, multiplexing means (circuit) which can (first) multiplexes a number of VLs holding packet data 310 (frame data) as a first output when set to a (first) link width, and can (second) multiplexes a different number of VLs holding packet data 310 (frame data) as a second output when set to another (second) selected link width, where setting up the Active Link Width to 1x, 4x or 12x determines the number of supported subsets (or all) of VLs carrying data).

**Regarding claims 3 and 8**, Parthasarathy describes a prescribed number of registers, corresponding to the prescribed maximum link width, for storing respective units of the frame data, the outputting step including outputting the frame data units in a sequence relative to the selected active link width (fig. 6 & col. 10, lines 2-5, VL FIFOs (registers) for storing data packets 310 (frame data) to be sent in 1x, 4x or 12 link width, inherently mapped in sequence to be multiplexed and transmitted).

**Regarding claims 4 and 9**, Parthasarathy describes that the second multiplexer circuit is configured for grouping the frame data units into a plurality of unit groups, the outputting step including causing the second multiplexer circuit to output each of the unit groups in sequence based on the sequencing signals (fig. 6 & col. 10, lines 6-10, where the (second) multiplexing means (circuit) multiplexes (groups) data packets 310 (frame data), the step of multiplexing the subset of VLs for transmission of a link is inherently in order (sequence) based on selected VLs (sequencing signals)).

**Regarding claims 5 and 10**, Parthasarathy describes that the outputting step includes outputting from the first multiplexer a corresponding one of the frame data units in sequence (fig. 6 & col. 10, lines 6-10, where the (first) multiplexing means (multiplexer) outputs data packets 310 (frame data) from the VL FIFOs in order (sequence)).

### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Parthasarathy (US 6,831,916) and Azar (US 6,680,951).


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Warner Wong whose telephone number is 571-272-8197. The examiner can normally be reached on 6:30AM - 3:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Warner Wong  
Examiner  
Art Unit 2616

  
RICKY Q. NGO  
SUPERVISOR  
PATENT EXAMINER